

PATTI ANN - M/037/003

Location: Section 33, T29S, R24E

DOGM 1988 ESTIMATE

Reclamation Plan:

All structures presently on site will be demolished and rubble buried or removed from the site. If the low grade ore stockpile presently on site exists, the pile will be pushed up against the hillside on the northern side of the existing access road and regraded to a maximum slope gradient of 3H:1V. Topsoil in the immediate vicinity of the pile will be salvaged and used as cover for the pile. If a borrow area for cover topsoil can be established within a two mile radius of the Patti Ann, topsoil adequate to cover the low-grade stockpile with 0.5 feet of soil will be hauled in and spread over the recontoured pile.

The top of the pre-law pad area associated with the Columbus shaft will be ripped and seeded. The waste stockpile located on the Columbus shaft pad will be recontoured and covered with material from the pad. No attempt at reclamation of the spoil pile outslopes will be made, because of their pre-law status.

The existing portal entry will be closed by dozing material into the entry and recontouring the covered portal area. All slopes will be regraded to a maximum gradient of 3H:1V, with the exception of the dump associated with the Columbus shaft.

The entire disturbance area will be seeded with native grass and shrub species recommended by the BLM and UDOGM.

Bond Estimate:

The bond estimate prepared by Frank Filas (UDOGM; 7-27-88) appears to be a good approximation of total liability at the Patti Ann. This estimate is attached.

Total Bond Amount: \$23,800

Patti Ann, M/037/003

Description:

The site covers 9.4 acres. A shaft and decline will have to be sealed. Two buildings will have to be removed and the foundations broken up and buried. The sides of main pad/waste dump have good vegetative growth and regrading of this area is not recommended. Most of the reclamation cost will be associated with regrading and topsoiling of the low grade ore stockpile and a small waste dump on top of the main pad. Rio Algom has recently removed some of the low grade ore which should reduce the reclamation cost further.

<u>Item</u>	<u>Amount</u>	<u>Rate</u>	<u>Cost</u>
Remove Structures and Debris	2 buildings & Substation	lump sum (assume some salvage)	\$3,000
Backfill Portal and Shaft		lump sum	\$1,000
Regrade Ore Stockpile & Waste Dump	24 hrs. D-6	\$100/hr	\$2,400
Haul in soil and cover stockpile and dump	6,000 yds.	\$1.50/yd	\$9,000
Rip & seed 9.4 acres plus 2 acre borrow areas	D-6 and two laborers 24 hrs.	\$130/hr	\$3,100
Seed	11.4 acres	\$70/ac.	\$,800
		Subtotal	\$19,300
		10% Contingency	\$1,900
		Total in 1988 \$	\$21,200
		Escalation (2.3% for 5 years)	\$2,600
		Total in 1993 \$	\$23,800